

## Tobacco Surveillance Data Brief: A Profile of New Jersey Quitcenters

The vast majority of smokers in New Jersey and the country at large want to quit but only a small proportion succeed each year.(1-2) Success rates increase dramatically when smokers use evidence-based treatments such as behavioral counseling or medication.(3) The CTCP understands the importance of increasing access to cessation services to smokers who want to quit. New Jersey Quitcenters provide low-cost face-to-face counseling in both group and individual treatment formats. The purpose of this brief report is to describe the characteristics and outcomes of smokers at New Jersey Quitcenters.

### Demographic Profile

Between January 2001 and August 2006, a total of 7,426 people visited one of New Jersey's Quitcenters. Of these, 4,975 defined a target quit date and were considered eligible for 6-month follow-up.

The largest proportion of clients were referred to the Quitcenter by friends (29%) or health care professionals (20.5%) while fewer were referred by other New Jersey Quit services; only 2.2% reported being referred by NJ Quitnet and less than 1% by NJ Quitline. Notably, 5.3% of clients were referred by a former Quitcenter client, 6.3% by a newsletter, and 6.7% by their employer.

Table 1 contains an overview of the demographic makeup of Quitcenter clients. Overall, the majority of clients were white (66.2%), but African Americans (23.9%) made up a sizeable proportion. The bulk of clients were in middle and late adulthood. At the time of initial intake, 40.8% of the clients reported being between the ages of 25 and 44 and 45.2% reported being between 45 and 64 years of age.

A sizeable proportion of Quitcenter clients were employed full-time, married or living with a partner, and were well educated. Overall, 47.4% were employed full-time and 43.1% reported being married or living with a partner. Lastly, just under a quarter (23.1%) of the clients had a bachelor's degree or higher, while 37.2% had some college or technical school, and 39.7% had a high school diploma or less.

## Health Status

The majority of Quitcenter clients reported having a disease they believe is caused or made worse by smoking, and a sizeable proportion had received treatment for emotional or behavioral problems. Specifically, 57% of clients reported having a disease they believe is caused or made worse by smoking and 43.7% reported having received treatment for emotional or behavioral problems.

## Smoking History

Quitcenter clients initiated and became regular smokers at a young age, and have been smoking a long time (see Table 2). The average age of smoking initiation for Quitcenter clients was 15 years of age. Overall, the majority of clients initiated smoking between the ages of 13 and 17 (59.9%). The average age of onset of regular smoking was 17 years of age. Similar to smoking initiation, the majority of clients began smoking regularly between the ages of 13 and 17 (51.3%). The average number of years a client smoked was 25 years. In addition, clients tended to be heavy smokers and indicated a high degree of nicotine dependence. The average cigarette consumption was 20 cigarettes or 1 pack per day. Almost two-thirds of clients (61.7%) reported smoking a pack or more a day, while 38.3% reported smoking less than a pack a day. In addition, almost half (45.8%) of clients reported waking up at night for a cigarette. Moreover, 41.7% of clients smoked their first cigarette within five minutes of waking up, 41.1% between 6 and 30 minutes, and 17.2% waited more than 30 minutes after waking up.

**The average Quitcenter client has smoked for 25 years and/or smoked a pack of cigarettes a day.**

The vast majority of Quitcenter clients made prior quit attempts. Overall, 89.8% of Quitcenter clients made at least one prior quit attempt; the average number of prior quit attempts was six. The majority of clients made between 1 and 5 prior quit attempts (68%), while a sizeable proportion made between 6 and 20 (18.7%).

## Treatments

At the initial visit, clients complete the initial patient information questionnaire. Subsequently, they may be treated with individual or group sessions, medication, or a combination of Quitcenter contacts and medication. Including the initial assessment, clients had an average of 5.4 contacts with the Quitcenter. As shown in Table 2, 19.5% of clients had one contact with the Quitcenter, 41.8% had between two and five contacts, and 38.7% had more than five contacts. Of the clients who

responded to the 6-month follow-up, over three-quarters reported the treatment they received was excellent or good.

**The most commonly used medication was the nicotine patch (60.7%) followed by the nicotine inhaler (34.1%) and nicotine gum (20.7%).**

Overall, 78.5% of clients who completed the 6 month follow-up reported using at least one type of medication, and 45.4% reported using more than one type of medication during their treatment. The most commonly used medication was the nicotine patch (60.7%) followed by the nicotine inhaler (34.1%) and nicotine gum (20.7%).

### Quit Rates

In this brief, we report two types of quit rates. First is the intent to treat (ITT) quit rate, which assumes that patients who did not complete a follow-up assessment are smokers. The ITT quit rate is intended to reflect how well the treatment works in the “real world,” where clients may not comply with treatments prescribed by their clinicians and is considered a more conservative outcome measure. The second quit rate includes only clients who completed the follow-up assessment, which allows for a closer look at success rates by different treatment formats. In both cases, patients were considered abstinent from tobacco if they self-reported not using tobacco in the seven days preceding the follow-up assessment.

Table 1 provides quit rates by demographic characteristics. The overall ITT quit rate was 24.4%. Whites and those 65 years of age or older were more likely to report not smoking at the 6-month follow-up. Whites had an ITT quit rate of 27.3% compared to 17.8% of African Americans and 20.6% of Hispanics. Clients 65 years or older had an ITT quit rate of 33.7% compared to 28.3% of those 45-64 years of age, 23.1% of those 25-44 years of age, and 14.6% of 18-24 year old clients. Similarly, clients who were married or living with their partner and those with a bachelor’s degree or higher were more likely to report not smoking. Almost 30% of clients who were married or living with their partner reported not smoking compared to 23.1% of those who were separated, divorced, or widowed, and 26.4% of clients who were never married or single. Almost one-third (31.5%) of clients with a

**The overall intent-to-treat quit rate among Quitcenter clients was 24.4%.**

bachelor's degree or more reported not smoking compared to 24.4% of clients with some college or technical school, and 20.5% of those with high school or less.

Table 2 presents quit rates by smoking history and treatment formats. Clients who reported waking at night for a cigarette or smoking within the first five minutes of waking up are less likely to report quitting. Overall, the ITT quit rate of those who reported waking at night for a cigarette was 20.8% compared to 28.1% for those who did not wake at night. Similarly, 21.8% of those who smoked within 5 minutes of waking up reported quitting compared to 25% of those who smoked between 6 and 30 minutes, and 29.8% of those who waited more than 30 minutes to smoke.

Notably, clients who were regular smokers for 10 or fewer years were less likely to report quitting (20.9%). When restricting the analysis to only those who completed the follow-up assessment, 44.4% reported quitting at 6-month follow-up. Clients who used medication or who had more contacts with Quitcenters were more likely to

**Clients who used medication or who had more contacts with Quitcenters were more likely to report not smoking.**

report not smoking. Among clients who used medication, 46.7% successfully quit compared to 35.7% of those who did not use medication. Similarly, 58.3% of clients with more than 5 Quitcenter contacts reported not smoking at the 6-month follow-up compared to 39.6% of those with 2-5 contacts, and 28.4% of those with 1 contact.

## Implications and Recommendations

The New Jersey Quitcenters treat highly nicotine dependent clients who have already tried to quit and failed. Over 60% of Quitcenter clients had been smoking for 20 years or more and on average, smoked about a pack a day. In addition, the vast majority of clients made a prior attempt to quit smoking. The Quitcenters are successful in treating their clients, achieving respectable quit rates even among those most addicted or with preexisting physical or mental health conditions. The overall Quitcenter quit rate (24.4%) is double the abstinence rate estimated by the U.S. Public Health Service for quitters with no treatment (10.8%) and much higher than the estimated quit rates for those who seek group (13.9%) or individual (16.8%) counseling.(2) High rates of cessation were achieved in a range of treatment settings and among a diverse client population.

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Tobacco dependence treatment at New Jersey Quitcenters is effective, in particular pharmacologic intervention and greater contact with Quitcenters can increase a client's chance of quitting smoking. Program administrators and health insurers should ensure that Quitcenters have the training, support, and financial reimbursement necessary to continue to provide consistent, effective intervention to smokers. Previous research suggests that reimbursement for tobacco dependence treatment may increase the use of treatment by smokers and may double the number of successful quitters (3-5).

To accurately assess the effectiveness of tobacco dependence treatment, it is important to achieve high follow-up rates with clients. Almost half of all New Jersey Quitcenter clients were not reached for the 6-month follow-up assessment, which illustrates a critical need to improve follow-up methods to gain a more accurate picture of the treatment experience. The analyses of these data were limited by the large loss to follow-up and data were not available on medication use or number of contacts for clients that were not reached for the 6-month follow-up assessment. Individual Quitcenters may find it difficult to divert limited resources to improving their methods for reaching clients for follow-up. The CTCP should consider an independent, centralized method for collecting process and outcome data from all Quitcenter clients, including 6- and 12-month quit rates, in order to improve follow-up rates of clients and allow Quitcenter clinicians and staff to focus on service delivery.

**Table 1. Quit rate among New Jersey Quitcenter clients, by race, age, gender, employment status, marital status, education, disease, and emotional/behavioral treatments. – Quitcenter data, 2001-2006**

	n=4975	ITT Quit Rate	6-Month Follow-up Quit Rate
<b>Overall</b>	<b>%</b>	<b>24.4 (4975)</b>	<b>44.4 (2740)</b>
<b>Race</b>			
White	66.2	27.3	46.8
African American	23.9	17.8	37.4
Hispanic	6.7	20.6	42.2
Other	3.2	23.6	40.2
<b>Age</b>			
18-24	7.8	14.6	33.6
25-44	40.8	23.1	41.3
45-64	45.2	28.3	43.7
65+	6.1	33.7	50.3
<b>Gender</b>			
Male	40.5	25.2	46.6
Female	59.5	24.0	43.0
<b>Employment Status</b>			
Full-time	47.4	27.3	47.7
Full-time student	5.5	19.0	40.2
Sick/Disabled	12.0	22.1	38.4
Unemployed	15.1	16.8	35.0
Other	20.0	27.1	47.2
<b>Marital Status</b>			
Married/Living together	43.1	29.2	48.2
Separated, Divorced, Widowed	26.4	23.1	42.0
Never Married/Single	30.5	20.1	39.8
<b>Education</b>			
High School or less	39.7	20.5	40.5
Some College/Tech school	37.2	24.4	43.6
Bachelor's or higher	23.1	31.5	50.9
<b>Disease Caused by Smoking?</b>			
Yes	57.0	25.4	42.1
No	43.0	24.3	42.5
<b>Emotional/Behavioral Treatment?</b>			
Yes	43.7	24.1	41.4
No	56.3	25.4	46.6

**Table 2. Quit rate among New Jersey Quitcenter clients, by smoking history, medication usage, and number of contacts with the Quitcenter – Quitcenter data, 2001-2006**

	n=4975	ITT Quit Rate	6-Month Follow-up Quit Rate
<b>Overall</b>	<b>%</b>	<b>24.4 (4975)</b>	<b>44.4 (2740)</b>
<b>Age of First Use</b>			
Less than 13	19.3	21.6	42.7
13-17	59.9	24.9	43.8
18+	20.8	26.7	46.5
<b>Age of Regular Use</b>			
Less than 13	7.1	19.1	41.5
13-17	51.3	23.8	42.8
18+	41.6	26.4	46.2
<b>Years of Regular Use</b>			
10 or fewer	19.6	20.9	42.7
11-20	19.6	25.5	47.1
21-30	26.5	24.8	43.5
More than 30	34.3	26.4	44.6
<b>Cigarettes Per Day</b>			
Fewer than 20	38.3	24.5	45.6
20 or More	61.7	24.7	43.5
<b>Wake at Night For Cigarette?</b>			
Yes	45.8	20.8	37.6
No	54.2	28.1	49.5
<b>Minutes Before 1st Cigarette</b>			
0-5	41.7	21.8	40.1
6-30	41.1	25.0	43.4
More than 30	17.2	29.8	55.0
<b>Prior Quit Attempts</b>			
Zero	10.2	20.0	43.3
1-5	68.0	24.5	43.9
6-20	18.7	27.2	44.9
More than 20	3.1	27.8	41.7
<b>Used Medication?<sup>1</sup></b>			
Yes	78.5	**	46.7
No	21.5	**	35.7
<b>Number of Contacts<sup>1</sup></b>			
1	19.5	**	28.4
2-5	41.9	**	39.6
More than 5	38.7	**	58.3

<sup>1</sup> No data are available on medication use or number of contacts for those not reach for follow-up. Overall measures and quitrates are only based on those reached for 6-month follow-up (n=2740).



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## Citations

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## Methodology

The data in this brief were obtained from the Quitcenter database maintained by the New Jersey Department of Health and Senior Services (NJDHSS). The NJDHSS collects data on all people who visited one of New Jersey's Quitcenters since 2001. Between January 2001 and August 2006, a total of 7,426 people visited one of New Jersey's Quitcenters. The analysis excluded clients who indicated they had not smoked cigarettes in the last 6 months, had stopped smoking, or were not current cigarette smokers. Of the remaining clients, 4,975 smokers set a quit date and 2,740 (55.1%) completed the follow-up assessment at 6 months. Self-reported smoking status at 6-month follow-up was verified when possible by measuring the clients' expired air carbon monoxide, a breath test of tobacco smoke intake.

For more information on the data reported in this brief, contact the New Jersey Department of Health and Senior Services at 609-292-9194, or visit their website at: <http://www.state.nj.us/health/as/ctcp>.

Suggested Citation: UMDNJ-School of Public Health (2007). Tobacco Surveillance Data Brief: A Profile of New Jersey Quitcenters, Volume 2, Issue 2.